

Iron chlorosis intensifying on Kentucky bluegrass
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The yellowing of Kentucky bluegrass lawns, sports fields, and golf turf is becoming quite severe around Nebraska. This happens every August as the soils become warm and wet. It is thought that the iron extraction systems in grass roots, called phyto siderophores, stop working normally. This reduces iron uptake and leads to iron deficiency.

We studied iron chlorosis correction at Heritage Hills Golf Course in McCook a few years ago. Different chelated products were applied and then watered in. None of those treatments fixed the yellow leaves. We believe it was because we watered it in (on purpose). We then re-applied the different iron products to the grass foliage and didn't water in the applications. This response further suggested that this issue is occurring in the roots. All of the different iron treatments fixed the issue and higher rates resulted in darker green grass. Chelate form wasn't that important because it was a foliar application and chelates are designed to aid nutrient availability in the soil.

Here are some tips to help combat iron chlorosis issues in the summer:

- Avoid excessive irrigation. The chlorosis is usually worse around irrigation heads. Try to dry the soil down between irrigation events.
- Avoid nitrogen fertilization. Extra nitrogen fertilization increases growth rate and further dilutes the iron concentrations within the plant. This will intensify the chlorosis.
- Apply liquid iron products to the foliage. Chelated products or iron sulfate applied at 1-2 oz/1000 ft² can help. Don't water the iron in after the application. Avoid driving over the fertilizer application (cart, mower, etc.) because that can leave black track marks in the turf.

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Figure 1. Iron chlorosis is most commonly observed around irrigation heads. Limit irrigation frequency to minimize the risk of iron chlorosis in Kentucky bluegrass growing on high pH soils.